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ABSTRACT

The need for evaluation of drug abuse treatment programs has been generally recognized and mandated by law since 1976. To learn to what extent such evaluations are actually performed and to obtain information about those evaluations, drug abuse treatment programs receiving federal funds in 1979 were surveyed. Questionnaires were sent to a random sample of programs (N=628), with 341 responding (54%). Among the questions asked were the number of actual evaluations conducted, the way data were collected and analyzed, and the sources of the evaluation personnel. Responses were tabulated in terms of three categories of evaluation, i.e., in-treatment, follow-up, and process/cost. Results indicated that substantial numbers of programs receiving National Institute for Drug Abuse funding at the time of the survey had conducted recent evaluations of their programs. In-treatment evaluation was the most prevalent type of evaluation conducted, with follow-up evaluation conducted by 20% of the programs surveyed. Among the seven major conclusions were that: (1) larger treatment programs with greater resources were more likely to carry out evaluation; (2) program staff involvement in the evaluation process was widespread; and (3) significant changes in program operations resulted from the various program evaluations. (PAS)

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National Institute on Drug Abuse

TREATMENT RESEARCH REPORT

Assessing Treatment: The Conduct of Evaluation Within Drug Abuse Treatment Programs

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National Institute on Drug Abuse

CG 016398

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SUMMARY

A recent survey of 341 drug abuse treatment programs which were federally funded disclosed that some 44 percent reported themselves as having conducted at least one program evaluation in the preceding year. To qualify as evaluation, the study had to have at least the following characteristics: (a) a definition of relevant variables; (b) clear effort at data gathering; (c) data analysis; and (d) the reporting of study results. Using this definition, 40 percent of the programs surveyed reportedly performed some sort of in-treatment evaluation, slightly less than one-fifth reportedly performed followup evaluation, and 7 percent reportedly performed process or cost evaluation. The survey data did not permit conclusions regarding the quality of these evaluations. Due to the small number of programs identified as conducting process/cost evaluations, details of process/cost evaluations were omitted from this report.

The typical in-treatment evaluation used data from the Client Oriented Data Acquisition Process (CODAP) aggregated for an admission sample. Thus, about three-quarters of the programs reporting in-treatment evaluation claimed a use of CODAP admission and discharge data to permit comparison of a group of program clients at beginning and end of treatment, or to permit comparison of one group of a program's clients with a group of clients from another program or programs. Programs typically reported the use of several outcome measures for in-treatment evaluation. The most commonly reported were employment status, drug use during treatment, arrests during treatment, time in treatment, and reasons for discharge. Each was reported by at least 80 percent of those programs conducting in-treatment evaluations. The majority of programs (58 percent) conducting in-treatment evaluation made comparisons of client functioning before and after treatment (i.e., admission and discharge comparisons). Other programs made comparisons of their clients' performance with other CODAP data, or compared subgroups within their own programs.

The most common purposes for performing in-treatment and followup evaluations were as supports to internal program planning and administration. Each of these was reported by about two-thirds of programs conducting in-treatment evaluation. The next most frequently given purposes for conducting in-treatment and followup evaluations were as requirements for funding and licensure, reported by 54 and 51 percent, respectively, of programs conducting in-treatment evaluation, and lesser but substantial percentages of those reporting followup evaluations.

The source of personnel used in evaluations varied depending on the type of evaluation. Some 82 percent of the programs reporting in-treatment evaluation utilized their own personnel for conducting the evaluation, and similar patterns were observed for followup evaluation. Involvement of single State agency personnel in these evaluations was reported by about 40 percent of the programs conducting in-treatment evaluation and 18 percent for those reporting followup evaluation. Lesser percentages utilized consultants to perform their evaluations.

Some 55 percent of the programs involved in evaluation reportedly made formal oral reports (briefings) to clinic staff, while 69 percent reportedly provided written reports to program staff. About 70 percent of the programs involved in evaluation provided written reports of evaluation findings to the single State agency, and 32 percent provided oral briefings to single State agency staff. Most programs reported some change in program functioning consequent to their evaluations. In order of the frequency with which they were mentioned, the aspects of programming most often reported as affected were: counseling practices, intake processing, outreach activities, and (mentioned equally often) administrative procedures and aftercare services.

Clinic size appeared to be related to whether or not evaluation was performed, with evaluation more common in the larger programs. It was not

possible to determine whether receipt of evaluation manuals produced by NIDA had a decisive effect on the performance of evaluation.

When program directors were asked to indicate needs and resources related to evaluation, the most commonly mentioned needs were in the areas of staff training and technical assistance.

Major conclusions growing out of the study were:

- substantial numbers of programs were found to conduct some form of evaluation, with the most common type being in-treatment (i.e., immediate impact) evaluation;

- larger treatment programs which have greater resources appear more likely to carry out evaluation;

- program staff involvement, which is also important to acceptance and utilization of evaluation, appeared to be widespread among programs conducting evaluation;

- the majority of programs conducting evaluation had established regular channels for feedback to program staff and to the single State agencies; and

- significant changes in program operation as a result of evaluation were reported by a substantial number of programs, with the most common kinds of changes involving intake processing, counseling regimen, outreach, and aftercare.

ASSESSING TREATMENT: THE CONDUCT OF EVALUATION IN DRUG ABUSE TREATMENT PROGRAMS

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INTRODUCTION

This report presents the findings of a survey of 341 drug abuse treatment programs which were receiving Federal funds in 1979. The purpose of this survey conducted in 1979 was to ascertain the extent to which drug abuse treatment programs funded by the National Institute on Drug Abuse (NIDA) performed evaluation and related activities during the year immediately prior to the survey. In particular, information was obtained regarding actual performance of such evaluation activities, the sources of personnel used in the evaluation, the nature and types of data collected and analyzed, the purposes for which evaluations were conducted, the dissemination of evaluation results, and program changes which came about as a result of these evaluations. Information was also obtained on the utilization of NIDA evaluation materials disseminated in late 1977, as well as information on evaluation resources available to the programs surveyed and evaluation related needs as perceived by the directors of those programs.

The study was undertaken to provide basic information about the extent to which in-treatment, followup, and process/cost evaluations had been carried out during the time period in question. These three types of evaluation were defined as follows:

- In-treatment evaluation was defined as systematic utilization of client status data (such as drug use, employment, and arrests during treatment and status at termination) during the course of treatment with comparisons being made against some fixed standard or known baseline.

- Followup evaluation involves locating and interviewing a sample of clients after they have left treatment, with the objectives being the assessment of "treatment effects" based on improvement of posttreatment drug use, employment, criminality, and/or other indicators of functioning in the community. Such followup evaluations should, but do not always, involve comparison of treated clients with a group of similar clients receiving no treatment, less treatment, or different treatment.

- Process/cost evaluation provided a somewhat broader category for responses. Process evaluation, as its name implies, involved the examination of program operations to ascertain how well the program functions and defining the model on which it is based. Cost benefit evaluation addresses the efficiency of a program, usually expressed in terms of cost of service relative to a given benefit, i.e., cost per drug free day, or cost per favorable treatment termination.

The need for evaluation of drug abuse treatment programs has been generally recognized and mandated by law since 1976 (P.L. 94-231), with evaluation plans required as part of the funding application for programs receiving Federal funds through NIDA. However, it has never been clear to what extent such evaluations were actually performed, nor has systematic information been available on the details of those evaluations. The data collected and presented in this report represents a first attempt to provide such information, although on a somewhat limited basis.

Review of Related Studies

As is noted above, evaluation of drug abuse treatment programs funded by NIDA has been required since 1976. Similar requirements have existed for treatment programs funded by the National Institute of Mental Health (NIMH) and National Institute on Alcohol Abuse and Alcoholism (NIAAA), as specified in authorizing legislation for those Institutes. Because of intrinsic differences in the nature of program modalities, as well as treatment approaches and staffing characteristics, differences in the approaches used to evaluate funded programs of the three Institutes are evident.

Community Mental Health Centers (CMHCs) funded by NIMH have generally used process measures for evaluation (Windle and Woy 1977). The importance of outcome evaluation has been recognized (Woy 1980), although a conference on program

evaluation sponsored by NIMH in 1979 for the purpose of examining possible standardized outcome measures for CMHCs concluded that the state of the art had not yet developed to the point that such outcome measures were feasible (Analysis, Management and Planning. Inc., 1979). Some writers in the field, notably Ciarlo (1977) as well as Brodsky and Bigelow (1980) have dealt with developing systems for monitoring mental health treatment outcomes, although it is recognized that the multidimensionality of mental health treatment outcomes continues to present a problem for such posttreatment evaluation. A further problem which has complicated evaluation for CMHCs has been the inherent difficulty of defining evaluation (which may be for research, accountability, or management uses) and differentiating it from routine data collection and reporting activities.

The National Institute of Mental Health conducted a survey of the 325 federally funded CMHCs in 1972 (Windle and Volkman 1973) in which they sought to identify the kinds of evaluative activities which were taking place in those centers. They received 181 usable questionnaires in response to this mail survey and, as expected, found that the focus was almost entirely on process measures. While it is not entirely clear from this survey how many CMHCs performed no evaluation activities, the number would not seem to be high given the relatively frequent reporting of the service process measures and data on evaluation. Activities in a large sample of CMHCs are currently being analyzed.

A national treatment program monitoring system with outcome evaluation capability was established in 1975 by NIAAA with the ultimate objective of bringing all funded alcohol treatment and rehabilitation programs into the system (Patterson 1975). The system could be used for evaluation on a national level or evaluation of individual programs, as well as periodic compilation of client-oriented statistical data. Since this system includes development of periodic followup data such as client alcohol use and indices of alcohol problems and social functioning, the system has proven useful for both research and program management (Patterson 1979). In addition to outcome evaluation, this system can also be (and has been) used for certain kinds of process evaluation. In any event, the centralized nature of the system as it existed prior to 1981 stands in contrast to the drug abuse treatment system where self-evaluation by treatment programs has been viewed as more appropriate.

Drug abuse treatment programs are capable of being assessed with either process or outcome measures. In recent years, a great deal of emphasis has been placed on outcome measures, and large scale studies have been conducted on during-treatment evaluation (in which behavioral measures such as drug use, arrests, and employment were used as measures of client performance while undergoing treatment) and posttreatment outcome measures of drug use, arrest, employment, and other aspects of client functioning in the community have been used to assess the lasting impact of drug abuse treatment. These are addressed in Sells (1975) and in Simpson, Savage, Lloyd, and Sells (1978) and have been the basis of two evaluation manuals produced by NIDA for use by local programs (Quess and Tuchfeld 1977; Johnson, Nurco, and Robins 1977). These two self-evaluation manuals and their utilization will be the focus of some of the analyses in the present study.

Approach

The data presented in this report were obtained from responses to a mailout questionnaire which was sent to a random sample of 628 programs receiving treatment funds from NIDA during 1979 and having a program (static) treatment capacity of at least 25. The questionnaire contained a large number of questions addressing program evaluation and related activities in individual treatment programs. These questions included actual evaluations conducted (by type of evaluation), routine data collection activities conducted by programs, data collection and analyses conducted for evaluation, purposes of evaluations conducted, sources of evaluation personnel, evaluation needs and resources of individual programs, dissemination and utilization of evaluation results, and information relating to utilization of NIDA evaluation manuals.

A total of 341 usable questionnaires were returned, a response rate of 54 percent. While a sample obtained from the responses cannot be said to be random, owing to the inherent bias in response to mail questionnaire surveys, it should be pointed out that the responses obtained represent some 30 percent of all NIDA

funded programs meeting the sampling criteria. Moreover the modality/ environment characteristics of the programs responding are in approximately the same proportion as those in the universe from which the sample was drawn. Specifically, 46.3 percent of the programs responding were drug free outpatient, 35.5 percent "mixed" modality, 9.4 percent drug free residential, 5.9 percent methadone maintenance, and the remainder being either drug free day care programs or "drug free other." The data were also supplemented by site visits to a small number of programs (which had indicated that they performed evaluation) in order to develop more detailed information for use in interpreting the survey data.

A subsample of 100 programs which had been sent questionnaires, but had not responded, was randomly selected for telephone interviews in order to assess bias in the mail questionnaire sample. Of these 100 programs, 82 program directors were interviewed, with the remaining 18 refusing to be interviewed. Comparisons were made of parallel items in the questionnaires of the mail response sample and telephone interviews of the 82 program directors. These comparisons suggested that programs conducting in-treatment evaluation and followup evaluation tended to be over-represented among the mail questionnaire respondents, while programs conducting process/cost evaluations were under-represented. While the telephone interview results strongly suggest that the mail questionnaire sample is somewhat more active in evaluation and cannot be said to be wholly representative, the findings of the mail survey are important since they provide data on the nature and performance of evaluation by those service delivery programs making some investment in evaluation and reflect a comparatively large response (54 percent) to a mail questionnaire.

RESULTS

Responses by the program directors were tabulated generally in terms of the three categories of evaluation--in-treatment, followup, and process/cost. Generally accepted definitions (as previously specified) were used in the instructions sent with the questionnaire, although some degree of interpretation by the respondents was possible.

Because over-reporting based on liberal interpretations of the definitions provided was evident in the data obtained, a stringent criterion was used in analyzing data. Programs were considered to have performed evaluation only if they (1) indicated use of a data gathering plan, (2) defined criterion (e.g., outcome) variables, (3) analyzed data by means of some type of comparison, and (4) reported the results obtained to program or other staff.

Programs Performing Evaluation

As table 1 shows, some 44 percent of the programs surveyed were viewed as having performed an evaluation during the previous 12 months, i.e., conducted evaluations which met the study criteria enumerated above. About 40 percent of the programs conducted in-treatment evaluation, 19 percent followup evaluation, and 7 percent process/cost evaluation. Thus, it is evident that a significant number of programs conducted both in-treatment and followup evaluation. The data obtained in this survey did not permit judgments regarding the quality of the evaluations reported. A small number of site visits to programs claiming to have performed evaluation were conducted in order to obtain additional information on these evaluations. It became evident that the definition of evaluation varied among program directors. In some cases the evaluation performed was rigorous, and in many instances evaluation was considerably less formal. Thus, the data resulting from studies will vary in "research quality" although not necessarily in perceived utility to the treatment program.

Table 1. Percentage of programs reporting performance of evaluation during preceding 12 months
(N=341)

Type of evaluation	Percent
In-treatment evaluation	39.9
Followup evaluation	19.4
Process/cost evaluation	6.7
Total conducting any evaluation	43.7

NOTE: Programs were permitted to indicate as many as three categories of evaluation (i.e., multiple responses).

A further issue concerns the findings with regard to process/cost evaluation. In view of the relatively small number of programs considered to have conducted process/cost evaluations, this type of evaluation is omitted from the more detailed tabulations which follow, since the small numbers would be subject to chance fluctuations and interpretation would be difficult.

Sources of Personnel for Evaluations

Program directors were asked to identify the source(s) of personnel used in each kind of evaluation. As the responses in table 2 show, the great majority of these programs relied on their own personnel to carry out these evaluations, although many programs reported more than one source of personnel (multiple responses were permitted). Some 82 percent of the programs conducting in-treatment evaluation reported using their own staff; 18 percent used consultants selected by the program. About 40 percent of these programs used single State agency (SSA) staff for in-treatment evaluation, while 7 percent used consultants provided by the SSA.

Table 2. Source of personnel for in-treatment and followup evaluations reported by drug abuse treatment programs

Source of personnel (%)	In-treatment evaluation (N=136) (percent)	Followup evaluation (N=66) (percent)
Program staff	82.4	72.7
Program consultants	18.4	7.6
SSA staff	39.7	18.2
SSA consultants	6.6	4.5
Other	6.6	6.1

Programs conducting followup evaluation tended to rely primarily on their own staff. Of the programs conducting this type of evaluation, 73 percent used their own program staff, 8 percent used consultants selected by them, 18 percent used SSA staff members, and 4 percent used consultants provided by the SSA.

Thus, the personnel used in evaluations were primarily under the direction of the program conducting the evaluation and only a minority of the programs utilized SSA staff. Since the role of the SSA staff was not defined, it is unclear to what extent that staff acted in an advisory or in a directive role. Programs responding were, of course, permitted to report as many sources of personnel as they actually used and many programs obviously relied on more than one source of personnel.

Purposes of Evaluations

As may be seen in table 3, the purposes for performing evaluations were varied, with many programs reporting more than one purpose for a given evaluation. Among the purposes given for in-treatment evaluation both internal and external considerations were evident. Of these 136 programs reporting in-treatment evaluation, 68 percent cited internal planning and 65 percent program administration as purposes of the evaluations. Also prominent were funding and licensure which were cited by 54 percent and 52 percent, respectively.

Among the 66 programs reporting followup evaluation, 61 percent cited internal planning and 55 percent gave program administration as purposes. Funding and licensure were also considerations being reported by 33 percent and 27 percent of these programs, respectively.

Structure of Evaluation

Program directors were asked to indicate major characteristics of the evaluations actually conducted. Of particular interest were the data sources used,

Table 3. Purpose of in-treatment and followup evaluations reported

Purpose	In-treatment evaluation (N=136)	Followup evaluation (N=66)
Licensure	51.5	27.3
Planning		
1) internal	67.6	60.6
2) external (issued to umbrella agency)	26.5	21.2
Funding	53.7	33.3
Legislative response	8.1	6.1
Program administration	64.7	54.5
General research	23.5	19.7
Other	8.8	6.1

criterion variables used, and analyses conducted. Because the questionnaire requested a large volume of information, it was necessary to address these questions in the most straightforward manner. Thus, only general outlines of evaluation characteristics were obtained.

The use of the Client Oriented Data Acquisition Process (CODAP), a data system which included client admission and termination data in all federally funded drug treatment programs, was of particular interest. Because of the nature of CODAP, it was customarily collected at the clinic or program level and thus could be aggregated for use in evaluation. Three-quarters (76 percent and 72 percent, respectively) of programs conducting in-treatment evaluation reported use of CODAP admissions and termination data, with virtually all programs which utilized CODAP termination data also utilizing CODAP admissions data.

The remainder used some other data system such as the single State agency information system. CODAP admission and termination reports were also used by 48 percent and 51 percent, respectively, of programs conducting followup evaluation.

A wide range of criterion measures was reported (table 4), with the most common being client employment, educational status, drug use, arrests, time in treatment and reason for discharge. Each of these was reported by at least 72 percent of the programs conducting in-treatment evaluation. A variety of drug use measures were reported, with programs obviously relying on data from a multiplicity of sources. Self-reports of drug use by type of drug and self-reports by frequency were each reported by at least 72 percent of the programs conducting in-treatment evaluation. Although not shown in table 4, it was further noted that fully 99 percent of programs conducting evaluation used at least one of these two drug use measures. In addition to the self-reports, programs conducting in-treatment evaluation also indicated reliance on staff reports of client drug use (50 percent) and reports of client drug use from medical records (57 percent). It is not clear just how much overlap exists between these sources of data. Although not shown in table 4, 65 percent of the programs conducting in-treatment evaluation also used urinalysis to monitor client drug use during treatment and an additional 15 percent used some other method to monitor client drug use during treatment. It is reasonable to expect that these staff reports of drug use and reports of drug use from medical records include the 65 percent of programs monitoring drug use through urinalysis.

Similar outcome measures were used by programs conducting followup evaluation. Employment, self-reported drug use, and arrests following treatment were each reported as outcome variables by more than 85 percent of those programs. Lesser percentages reported other measures of productivity such as education and homemaker status. Days incarcerated following treatment were reported by 47 percent of the programs conducting followup evaluation.

Comparisons of data were made in any of several ways (see table 4). Some 58 percent of those conducting in-treatment evaluation compared clients' pretreatment status on criterion variables with their status at termination. Comparison of subpopulations within clinics was reported by 46 percent of programs conducting in-treatment evaluation, while 44 percent made comparisons between clinics or modalities. Comparisons with recently published CODAP data were reported by 43 percent of those conducting in-treatment evaluation.

Table 4. Structure of evaluations

	In-treatment evaluation (N=136)	Followup evaluation (N=66)
A. Outcome Variables		
1. Client's stability measures		
a) employment status	84.6	89.4
b) educational status	83.8	77.3
c) participation in skill development programs	76.5	68.2
d) homemaker status	57.4	47.0
2. Client's drug use		
a) self-reported drug use by drug type	78.7	86.4
b) self-reported drug use by frequency of use	72.1	81.8
c) staff report of drug use	59.6	60.6
d) drug use from medical records	56.6	36.4
e) days drug free	44.9	51.5
3. Client's criminal activity		
a) arrests during treatment	80.9	54.5
b) arrests following treatment	33.1	87.9
c) days incarcerated	57.4	47.0
4. Program participation		
a) reason for discharge	80.9	57.6
b) time in treatment	81.6	60.6
B. Type of Comparisons		
1. Compared outcome variables in subpopulations within your clinic	46.3	48.5
2. Compared outcome variables between clinics or modalities	44.1	36.4
3. Compared variables with published data		
a) recent CODAP data	43.4	28.8
b) NDATUS data	11.0	9.1
c) tables in evaluation handbook	5.9	1.5
d) other	5.1	3.0
4. Compared variables before and after treatment	58.1	66.7
5. Performed other analysis using statistical methodology	8.1	10.6

Pretreatment to posttreatment comparison of outcome variables was reported by 67 percent of programs conducting followup evaluation, while 48 percent made comparisons between subpopulations in their clinic, 36 percent made comparisons between modalities or clinics, and 29 percent made comparisons with published CODAP data.

Thus, while a number of outcome variable measures were reported, there was a tendency for programs to report client stability measures (especially employment), client drug use, and client criminal behavior with relatively high frequency. While these were reported for the two categories of evaluation, other variables such as time in treatment and reason for treatment termination were also encountered with high frequency among those programs conducting in-treatment evaluation. Comparisons of variables pretreatment and posttreatment (or at discharge) were commonly reported, both for in-treatment and followup evaluations, as were comparisons within clinics, between clinics, and with recent published CODAP data. As previously mentioned, no attempt was made to judge the quality of these evaluations.

Dissemination of Evaluation Results

The data in table 5 depict the percentage of programs utilizing different avenues for dissemination of evaluation findings. Clearly, since the program may use more than one method of disseminating findings, multiple responses are reflected in the data. The data obtained did not permit a separate breakout by type of evaluation and therefore table 5 is based on all 149 programs which reported conducting evaluation. Responding programs were asked to indicate how evaluation findings were disseminated and to what audiences. They were also asked whether these methods of dissemination were used on a regular or an irregular basis. Thus, percentages may be summed across regular and irregular use of a particular avenue of dissemination to a particular audience.

As table 5 shows, a variety of methods were reported for disseminating evaluation results to program staff, single State agency staff, and to others in the field, and many programs reported more than one method. Some 46 percent of the programs used formal oral reports to program staff on a regular basis, while 9 percent used this type of presentation irregularly.

Table 5. Method and regularity of dissemination of evaluation results (N=149)

Method of dissemination	Regularly	Irregularly	Total
A. Treatment program staff			
1. formal oral reports	46.3	8.7	55.0
2. written reports	57.7	11.4	69.1
3. informal communications	40.3	15.4	55.7
B. Single State agencies			
1. formal oral reports	28.2	3.4	31.6
2. written reports	59.7	10.7	70.4
3. informal communications	19.5	11.4	30.9
C. National Institute on Drug Abuse			
1. formal oral reports	12.1	3.4	15.5
2. written reports	31.5	8.1	39.6
3. informal communications	6.0	1.3	7.3
D. Other agencies			
1. formal oral reports	8.7	2.0	10.7
2. written reports	29.5	4.0	33.5
3. informal communications	7.4	1.3	8.7
E. Professional journal article	5.4	6.0	11.4

NOTE: Multiple responses were permitted, as appropriate.

Results were communicated to program staff through written reports on a regular basis in 58 percent of the programs and on an irregular basis in 11 percent. Informal communication of results on a regular basis was reported by 40 percent of the programs, while 15 percent reported such communications on an irregular basis.

Communication of evaluation findings to the single State agency was reported by a majority of the programs which conducted evaluations. Fully 70 percent of these programs provided written reports to the single State agency, with 60 percent doing so on a regular basis and about 11 percent on an irregular basis. Regular use of formal oral reports to the single State agency was reported by 28 percent of the programs conducting evaluation, while 3 percent did so irregularly. Informal communications were reported by 31 percent of the programs.

Forty percent of the programs conducting evaluation provided written reports to the National Institute on Drug Abuse; some 15 percent reported formal oral reports to NIDA, and 7 percent reported informal communication of results to NIDA.

Results were also disseminated to other agencies through written reports in the case of 33 percent of the programs conducting evaluation. Formal oral briefings and informal communication were reported by relatively small percentages of these programs. Articles published in the professional journals on the basis of evaluation findings were reported by 11 percent of the programs.

Thus, the majority of programs conducting evaluation tended to have well established channels for communicating their findings. As was appropriate, the prime recipients of this information tended to be program staff, although single State agencies also received regular reports. Predictably, informal communication of results tended to be most frequent at the program level and less with increasing distance from the program. Also provision of written reports to the single State agencies--which acted as a prime funding source--was much more common than to any other agency.

Impact of Evaluation

Table 6 depicts the reported changes in program operations which were identified as resulting from the evaluations. It should be noted that, as was the case with the previous table, percentages were based on the 149 programs considered to have conducted evaluation, and multiple responses were permitted. The most prevalent change was in counseling regimen, which was reported by 58 percent of the programs conducting evaluation, while the second most common change was in intake processing (50 percent), followed by expanded outreach efforts (46 percent). Changes in administrative procedures and aftercare were each

Table 6. Changes in program operations reported by drug abuse treatment programs as resulting from evaluation
(N=149)

Changes	Percentage
Staff size increased	20.1
Funding increased	20.8
Client contact time increased	26.2
Operating hours extended	20.1
Intake processing altered	49.7
Decreased staff/client ratio	10.7
Increased client/staff ratio	15.4
Changes in physical environment	26.2
Changes in counseling regimen	57.7
Developed new modality	29.5
Changed administrative procedures	40.3
Expanded outreach	45.6
Changes in aftercare provision	40.3
Other	3.4

NOTE: Multiple responses were permitted, as appropriate.

reported by 40 percent of the programs. Some 29 percent of the programs reported developing a new modality or clinic as the result of evaluation, while about one-fourth increased client contact time. About one-fourth of the programs reported changes in the physical environment of the treatment setting.

Thus, it is clear that change as a consequence of evaluation was widely reported, and that individual programs may have made numerous changes subsequent to a given evaluation. Two major thrusts of program changes were improvement of treatment through changes in services provided and expansion of services in an effort to reach more clients.

Evaluation Needs and Resources

Program directors were asked to identify their needs and resources for conducting evaluation. These two items were presented in open-ended format to allow the program directors to identify any need or resources they considered salient, and no attempt was made to dictate response categories in advance. The responses were then categorized for computation. Table 7 presents responses to these two items. Evaluation needs were identified by some 57 percent of the programs, while the remaining 43 percent did not identify needs. Some 42 percent of the programs identified evaluation resources available to them.

Among the programs surveyed, the most frequently reported evaluation need was staff training (37 percent), followed by data organization (11 percent). Regarding evaluation resources available to the programs, about 15 percent of the programs reported trained staff, while an additional 15 percent reported outside resources (such as consultants). An additional 7 percent reported access to a data system as an evaluation resource.

While the relatively low response rate to these two items makes it difficult to generalize, the pattern of responses suggests that training of program staff in evaluation and assistance in data base organization are two common needs. Outside resources such as consultants and data systems can be useful, although it is widely recognized that involvement of program staff in evaluation is important if those evaluations are to be accepted and have the greatest impact.

NIDA Evaluation Manuals

A subsidiary objective of this study was to examine the extent to which evaluation manuals produced by NIDA and disseminated to the field in 1977 had been received, retained, and were in use for evaluation at the time of the survey reported here. About 2 years had elapsed between the initial dissemination of two evaluation manuals--Manual For Drug Abuse Treatment Program Self-Evaluation (Guess and Tuchfeld 1977), and Conducting Followup Research in Drug Treatment Programs (Johnston, Nurco, and Robins 1977)--and the time of the survey. The percentage of programs which reported having received

Table 7. Evaluation needs and resources reported by drug abuse treatment programs surveyed
(N=341)

Item	Percent
A. Needs	
1. staff training	37.0
2. data organization	11.4
3. peer review	1.2
4. NIDA materials	2.9
5. outside consultants	4.7
6. none reported	42.8
B. Resources	
1. NIDA materials	1.8
2. outside resources	15.0
3. trained staff	15.5
4. technical assistance	2.6
5. data system	7.0
6. none reported	58.1

either of these documents (which had been mailed to all NIDA-funded treatment programs) was disappointingly small. As table 8 shows, 62 percent of the programs reported having received the Manual for Drug Abuse Treatment Program Self-Evaluation, and 45 percent had reported receiving Conducting Followup Research in Drug Treatment Programs, with 40 percent of the programs reporting having received both manuals. In fairness, it should be pointed out that staff turnover in drug abuse treatment programs is known to be high, and one might plausibly argue that many of the manuals either were not on hand when a change of program directors took place, or the manuals simply had never come to the attention of the program director and were either lost or misappropriated since being received. Thus, it is possible that a significant, but unknown, percentage of program directors simply had no opportunity to know whether the manuals had, in fact, been received.

These two manuals had somewhat different emphases from one another, with one being geared to in-treatment evaluation, primarily, and the other, as its name suggests, to followup evaluation. While the percentage reporting having received either or both of these documents was considerably less than expected, the overwhelming majority of those programs which reported receiving one of the documents also reported having the document available for use at the program site.

The programs which reported having received either of the two manuals were asked whether the manuals had been used in conducting an actual evaluation, or in training of program staff in evaluation methods. Slightly over one-fifth (21 percent) of the programs which received the Manual for Drug Abuse Treatment Program Self-Evaluation reported having used it in an actual evaluation, while an additional 9 percent had not used it for an evaluation but had used it for training staff. A comparable percentage (19 percent) of the programs which reported receiving Conducting Follow-up Research in Drug Treatment Programs used it in an actual evaluation, while 6 percent used it for training program staff.

These responses suggest that while some number of programs found the manual relevant and useful in actually conducting evaluation, the percentage doing so was considerably smaller than had been anticipated. One possible interpretation is that such materials alone are not highly effective and additional efforts in staff training and technical assistance in organizing and using data bases might enhance the effective utilization of these manuals. Of course, it should also be kept in mind that some of the programs may not have been in operation at the time the manuals were disseminated, and a number of responding program directors may have come to the programs after the manuals were disseminated. Turnover of staff in drug treatment programs is common and, therefore, the number of respondents having no opportunity to know whether the manuals

Table 8. Receipt, availability, and use of NIDA evaluation materials (N=341)

Item	Percent of Programs: Manual for Drug Abuse Treatment Program Self-Evaluation	Conducting Followup Research in Drug Treatment Programs	Both
Received materials	61.9 (N=341)	44.9 (N=341)	40.0
Materials available at treatment site	97.6 (N=211)	96.5 (N=153)	
Use of materials			
a. in actual evaluation	21.4 (N=211)	18.7 (N=153)	
b. in training staff in in evaluation	9.4 (N=211)	6.5 (N=153)	

had been received may be significant but unknown.

Variables Related to Evaluation

Several variables which were thought to possibly be related to the performance of evaluation were examined in relation to the actual performance of evaluation. Using a dichotomous classification of programs on the basis of whether they were considered to have conducted evaluation during the year prior to this survey, selected variables were examined in terms of their statistical relationship to the conduct of evaluation. The size of the programs or clinic appeared to be statistically related to the performance of the evaluation (with a chi square value beyond the .01 level, and Cramer's V = .20). Thus, the larger programs, which perhaps could be expected to have more resources for evaluation, appeared considerably more likely to conduct evaluation. Because of the relatively small numbers of methadone maintenance and drug free residential programs in the sample, as well as the large proportion of "mixed modality" programs, no attempt was made to relate modality to the performance of evaluation. The use of urinalysis to monitor drug use during treatment appears to be related to the actual conduct of evaluation. In some respects, the monitoring of drug use during treatment, especially using urine testing, may simply reflect the greater predisposition on the part of program management to use available tools for needed management information, including evaluation. In any event, the regular monitoring of drug use during treatment by urinalysis was moderately related to the performance of evaluation (chi square significant at .01 level, Cramer's V = .24).

Also considered was the possibility that the receipt of one of the two evaluation manuals mentioned above might be related to the performance of evaluation. However, the time interval of 2 years since dissemination and the high turnover among program staff would make interpretation of such a finding difficult. Therefore, this analysis was omitted.

DISCUSSION

The foregoing data indicates that substantial numbers of programs which had received NIDA funding at the time of the survey were found to have conducted evaluation during the previous year. In all, somewhat over two-fifths of these programs were conducting some sort of evaluation, and a substantial number of these were conducting more than one type of evaluation. The most prevalent type of evaluation was that most easily supported by existing client-oriented information systems--in-treatment evaluation. Followup evaluations were conducted by just under one-fifth of the programs surveyed. A relatively small number (7 percent) of programs were found to have conducted process/cost evaluations that adhered to standard evaluation study criteria.

Within programs, the evaluations tended to be local, relying largely on program staff or consultants, although substantial support by single State agencies was noted. The impetus for evaluation came from a variety of sources, both internal and external. While there appeared to be widespread recognition of the value of evaluation for internal planning and program administration, such external considerations as funding and licensure also appeared to be important. The use of systems already in place, such as CODAP, appeared to play a significant part in the evaluations conducted. Especially in the in-treatment evaluation, programs appeared to place heavy reliance on CODAP admission and discharge data, as well as other data systems. For both in-treatment and followup evaluation, the more commonly accepted behavioral measures of treatment outcomes were prominent in the structure of the evaluations, with considerable reliance on self-report of drug use, arrest, and productive activities including employment. Regarding in-treatment evaluation, monitoring of drug use through urinalysis appeared to be commonplace. The most frequently used comparisons in analyzing data were comparisons of variables before treatment and after treatment (in the case of in-treatment evaluation, of pretreatment, and at discharge), although considerable numbers of programs also made comparisons between subpopulations, clinics, and recently published CODAP data.

Programs conducting evaluation generally had well established procedures for disseminating evaluation results, with the majority reporting both to their own program staff and to outside organizations such as the single State agencies, NIDA, and other agencies. In addition, changes in program operations as a result of evaluations appeared to be widespread, with the most conspicuous changes being in

the direction of expanding program operations and improving services.

In examining factors which appeared to be statistically related to the performance of evaluation, clinic size appeared to be directly related, as did the regular collection of client drug use data during treatment. The evaluation manuals which were disseminated by NIDA 2 years prior to the study did not appear to be in widespread use, although about one-fifth of the programs reporting having received the manuals had actually used them in an evaluation.

Prospects for improving the performance of evaluation must necessarily be speculative at this point, since no attempt was made to assess the quality of evaluations being conducted by these programs and the responsibility for supporting evaluation has largely shifted to the State governments. Training and technical assistance offer avenues for improving the ability of programs to conduct evaluation, although evaluation manuals may also be useful in conjunction with these efforts. The greatest perceived needs on the part of the programs surveyed were in the areas of staff training and data base organization; and, given a commitment on the part of treatment program management, these are opportunities which should be pursued.

REFERENCES

Analysis, Management and Planning, Inc. "Workshop on Client/Patient Outcome Evaluation in Mental Health." Unpublished report. National Institute of Mental Health, Rockville, Md., 1979.

Brodsky, G., and Bigelow, D.A. The Oregon Program Impact Monitoring System. National Institute of Mental Health. Rockville, Md.: the Institute, 1980.

Ciarlo, J.A. Monitoring and analysis of mental health program outcome data. In: M. Guttentag, ed. Evaluation Studies Review Annual. Vol. 2. Beverly Hills, Calif.: Sage, 1977.

Guess, L.L, and Tuchfeld, B.S. Manual for Drug Abuse Treatment Program Self-Evaluation. National Institute on Drug Abuse. DHEW Pub. No. (ADM)77-450. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1977.

Johnston, L.D.; Nurco, D.N.; and Robins, L.N. Conducting Followup Research on Drug Treatment Programs. National Institute on Drug Abuse. DHEW Pub. No. (ADM)78-487. Washington, D.C.: Supt of Docs., U.S. Print. Off., 1977.

Patterson, D.G. Program Evaluation. Lexington, Mass: Lexington Books, D.C. Heath and Company, 1975.

Patterson, D.G. MIS use: Alcoholism program experience. Addictive Diseases: An International Journal. 3(4), 1979.

Sells, S.B. Program Evaluation. Lexington, Mass: Lexington Books, D.C. Heath and Company, 1975.

Simpson, D.D.; Savage, L.J.; Lloyd, M.R.; and Sells, S.B. Evaluation of Drug Abuse Treatment Based on First Year Followup. National Institute on Drug Abuse. DHEW Pub. No. (ADM) 78-801. Washington, D.C.: Supt. of Docs., U.S. Print. Off., 1978.

Windle, C., and Volkman, E. Evaluation in the centers program. Evaluation 1(2):69-70, 1973.

Windle, C., and Woy, J.R. When to apply various program approaches. Evaluation. Vol 4, 1977.

Woy, J.R. "Outcome Evaluation in the Eighties: Prospects for the Mental Health Field." Unpublished paper. National Institute of Mental Health, Rockville, Md., 1980.

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